



United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.		ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/672,345	09/28/2000		David I. Poisner	10559/364001/P8247-2	7729	
20985	7590	02/17/2004		EXAMINER		
FISH & RIC		,	KIM, HONG CHONG			
12390 EL CA SAN DIEGO				ART UNIT	PAPER NUMBER	
				2186	19	
				DATE MAILED: 02/17/200-	4	

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary Examiner		Application No.	Applicant(s)
Hong C Kim 2186	-	09/672,345	POISNER, DAVID I.
The MAILING DATE of this communication appears on the cover sheet with the correspondence address — Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions does men they be available under the provision of 37 CFR 1.13(e). In no event, however, may a roply be sinely filed after 50 K(g) MCMTRS from the mailing date of this communication. Fallus to reply within the set or extended period of his communication. Fallus to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (81 U.S. C.§ 133). Any reply recorded by the Office the than thin the month after the mailing date of this communication, even if threely filed, may reduce any exempts present term adjustment. See 97 CFR 1.74(e). Status 1) □ Responsive to communication(s) filed on 29 December 2003. 2a) □ This action is FINAL. 2b) □ This action is non-final. 3) □ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) □ Claim(s) 34-50 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) 34-50 is/are rejected. 7) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) □ The oratin of accordance is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some * c) □ None of: 1. □ Certified	Office Action Summary	Examiner	Art Unit
- The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions does men they be wisble under the provides of 37 CFR 1.136(s). In no event, however, may a reply be timely filed after 50 K (g) MONTHS from the melling date of this communication. False to five the provide melling date of this communication (s) (d) MONTHS from the melling date of this communication. False to reply within the set or extended period for reply will. by statutory preliament on the melling date of this communication. False to reply within the set or extended period for reply will. by statutory and the communication, even if amely filed, may reduce any exempts prefer term adjustment. See 97 CFR 1.744(s). Provided the melling date of this communication, even if amely filed, may reduce any exempts prefer term adjustment. See 97 CFR 1.744(s). Status 1) □ Responsive to communication(s) filed on 29 December 2003. 2a) □ This action is FINAL. 2b) □ This action is filed to the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) □ Claim(s) 34-50 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) 34-50 is/are rejected. 7) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are allowed. 7) □ Claim(s) is/are allowed. 7) □ Claim(s) is/are allowed. 8) □ The specification is objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) □ The drawing(s) filed on is objected to by the Examiner. Note the attached Office Action or form		Hong C Kim	2186
THE MAILING DATE OF THIS COMMUNICATION. Esteriolized of time may be available under the provision of 37 CPR 1.136(a). In no event, however, may a reply be timely field after SiX (6) MONTHS from the maling date of this communication. If the protein or entry specified above is less than the V(5) days, a reply within the stabulory minimum of thirty (30) days with be accordeded since). Failure to reply within the set or actended period for reply with (70) days, a reply within the stabulory minimum of thirty (30) days are provised. St (6) MONTHS from the realizing date of this communication. Failure to reply within the set or actended period for reply with up stabular, cause the application to become ABANDONED (25 U.S.C. § 133). Any reply received by the Office later than three more maling date of this communication, even if timely field, may reduce any example provided to the communication of the provided any example provided and example provided any example provided any example provided any example provided any example provided and example provided any example provided any example provided any example provided and example provided any example provided any example provided any example provided and example provided any example pr			
1)⊠ Responsive to communication(s) filed on 29 December 2003. 2a)□ This action is FINAL. 2b)☑ This action is non-final. 3)□ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4)☑ Claim(s) 34-50 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5)□ Claim(s) is/are allowed. 6)☑ Claim(s) is/are allowed. 6)☑ Claim(s) is/are objected to. 8)□ Claim(s) is/are objected to. 8)□ Claim(s) is/are objected to. 9)□ The specification is objected to by the Examiner. 10)□ The drawing(s) filed on is/are: a)□ accepted or b)□ objected to by the Examiner. Application Papers 9)□ The specification is objected to by the Examiner. 101□ The drawing(s) filed on is/are: a)□ accepted or b)□ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in aboyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11)□ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12)□ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)□ All b)□ Some * c)□ None of: 1.□ Certified copies of the priority documents have been received in Application No 3.□ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received.	THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a relified period for reply is specified above, the maximum statutory perion. - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mail	1. 1.136(a). In no event, however, may a reply within the statutory minimum of third will apply and will expire SIX (6) MON ute, cause the application to become AE	reply be timely filed ty (30) days will be considered timely. ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).
2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 34-50 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) 34-50 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some c) None of: 1. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received.	Status		
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 34-50 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) is/are allowed. 6) Claim(s) is/are objected to. 8) Claim(s) is/are objected to. 8) Claim(s) is/are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received.	1) Responsive to communication(s) filed on 29	December 2003.	
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4)	2a) This action is FINAL . 2b) ⊠ Th	nis action is non-final.	
Application of Claims 4) Claim(s) 34-50 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 34-50 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.		· · · · · · · · · · · · · · · · · · ·	·
4) Claim(s) 34-50 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.	closed in accordance with the practice under	r <i>Ex parte Quayle</i> , 1935 C.D). 11, 453 O.G. 213.
4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) ☒ Claim(s) 34-50 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some * c) □ None of: 1. □ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in Application No 4) □ Information Disciosure Statement(s) (PTO-1449 or PTO/SB/08)	Disposition of Claims		
4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) ☒ Claim(s) 34-50 is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) □ All b) □ Some * c) □ None of: 1. □ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received. Attachment(s) 10 ☑ Notice of References Cited (PTO-892) 21 □ Notice of Oratsperson's Particular (PTO-1449 or PTO/5B/08) 31 □ Information Disclosure Statement(s) (PTO-1449 or PTO/5B/08) 32 □ Notice of Oratsperson's Particular (PTO-152)	4) Claim(s) 34-50 is/are pending in the applicat	ion.	
5) Claim(s) is/are allowed. 6) Claim(s) 34-50 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) is/are objected to. 8) Claim(s) is/are objected to. 8) Claim(s) is/are objected to prestriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.			
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received.			
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.	6)⊠ Claim(s) <u>34-50</u> is/are rejected.		
Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.	7) Claim(s) is/are objected to.		
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.	8) Claim(s) are subject to restriction and	or election requirement.	
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) Motice of References Cited (PTO-892)	Application Papers		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1 Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) Di Notice of References Cited (PTO-892) Notice of Orafisperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date Notice of Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	9)☐ The specification is objected to by the Examir	ner.	
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) Altachment(s) Interview Summary (PTO-413) Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Paper No(s)/Mail Date. Notice of Information Disclosure Statement(s) (PTO-152)	10) The drawing(s) filed on is/are: a) □ ac	ccepted or b) objected to	by the Examiner.
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. *Attachment(s) Notice of References Cited (PTO-892)			
Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. *Attachment(s) Attachment(s) Attachment(s) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date Paper No(s)/Mail Date Notice of Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Replacement drawing sheet(s) including the corre	ection is required if the drawing	(s) is objected to. See 37 CFR 1.121(d).
12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. **Attachment(s) Notice of References Cited (PTO-892)	11)☐ The oath or declaration is objected to by the I	Examiner. Note the attached	d Office Action or form PTO-152.
a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. * See the attached detailed Office action for a list of the certified copies not received. * Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date Diagram Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Notice of Informal Patent Application (PTO-152)	Priority under 35 U.S.C. § 119	•	
a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 1 Notice of Informal Patent Application (PTO-152)	12) Acknowledgment is made of a claim for foreign	an priority under 35 U.S.C. 8	5 119(a)-(d) or (f).
2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☒ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) ☐ Notice of Informal Patent Application (PTO-152)			()
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) O	1. Certified copies of the priority docume	nts have been received.	
application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. *Attachment(s)	_		pplication No.
* See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) * See the attached detailed Office action for a list of the certified copies not received. 4) Interview Summary (PTO-413) Paper No(s)/Mail Date Paper No(s)/Mail Date Notice of Informal Patent Application (PTO-152)	3. Copies of the certified copies of the pri	iority documents have been	received in this National Stage
Attachment(s) Notice of References Cited (PTO-892)	application from the International Bure	au (PCT Rule 17.2(a)).	
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date. 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)	* See the attached detailed Office action for a lis	st of the certified copies not	received.
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)			
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)	Attachment(s)		
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Notice of Informal Patent Application (PTO-152)	Notice of References Cited (PTO-892)	4) Interview S	Summary (PTO-413)
	2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	_ Paper No(s	s)/Mail Date
· · · · · · · · · · · · · · · · · · ·			

Art Unit: 2186

Page -2-Paper No.19

Detailed Action

1. Claims 34-50 are presented for examination. Claims 1-33 has been canceled by the amendment. This office action is in response to the RCE filed on 12/29/03.

Claim Rejections - 35 USC 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 34-40 and 43-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Dinwiddie</u>, <u>Jr. et al. (Dinwiddie) US Patent 4,371,932</u> in view of <u>Gibson et al. (Gibson) US Patent 6,680,908</u>.

As to claim 34, Dinwiddie discloses a data processing system, comprising: a processor (Fig. 1 Ref. 11 or 1); a main memory (Fig. 1 Ref 22 or 7 or 15);

Art Unit: 2186

a multi-ported memory (Fig. 1 Ref. 25, 27, and 30, bi-directional arrows on both sides reads on this limitation, col. 14 lines 60-63) in communication with the processor and the main memory; and wherein the system is configured to receive a request to write information to a memory location, wherein the information has an information type equal to data (Col. 5 lines 1-10 and 48-49) or control information (Fig. 1 addr bus & command register, Ref. 25 and col. 14 lines 47-63), and wherein the system is further configured to determine a memory destination between the main memory (col. 5 lines 1-3) or the multi-ported memory based on the information type (separate address and control registers Refs. 25 and 30 and data memory Ref. 22 reads on this limitation, since address and control are directed to registers Refs. 25 and 30 while data is directed to memory 22). However, Dinwiddie does not specifically disclose a storage capacity of about 4 kilobytes or greater.

Gibson discloses a storage capacity of about 4 kilobytes or greater (col. 6 lines 12-15) for the purpose of providing adequate space for the system thereby prevent system slow down or crash.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a storage capacity of about 4 kilobytes or greater as shown in Gibson into the invention of Dinwiddie for the advantages stated above.

Art Unit: 2186

Page -4-Paper No.19

As to claims 45 and 48, the claims 45 and 48 encompass the same scope of the invention as that of the claim 34. Therefore, the claims 45 and 48 are is rejected for the same reason as the claim 34.

As to claim 35, Dinwiddie and Gibson disclose the invention as claimed above. Dinwiddie further discloses an operating system configured to determine the memory destination based on the information type (separate bus and register for address, control and data read on this limitation).

As to claim 36, Dinwiddie and Gibson disclose the invention as claimed above. Dinwiddie further discloses the system further includes: peripheral device (Fig. 1 Ref. 3); and peripheral device controller (Fig. 1), wherein the controller is configured to determine the memory destination based on the information type (separate bus and register for address, control and data read on this limitation).

As to claim 37, Dinwiddie and Gibson disclose the invention as claimed above.

Dinwiddie further discloses the multi-ported memory is included in a memory controller (Fig. 1 Ref. 2)

As to claim 38, Dinwiddie and Gibson disclose the invention as claimed above. Dinwiddie further discloses the multi-ported memory is dual-ported (Fig. 1 Ref. 25 and col. 14 lines 60-63)

As to claim 39, Dinwiddie and Gibson disclose the invention as claimed above.

Dinwiddie further discloses the multi-ported memory and memory controller are integrated into a single chip (Fig. 1).

As to claim 40, Dinwiddie and Gibson disclose the invention as claimed above. Dinwiddie further discloses the multi-ported memory includes memory chosen from the group consisting of static random access memory and dynamic random access memory (col. 14 line 60, Register reads on this limitation).

As to claim 43, Dinwiddie and Gibson disclose the invention as claimed above. Dinwiddie further discloses a memory controller (Fig. 1) in communication with the main memory and the multi-ported memory; and a peripheral device (Fig. 1 Ref. 3) in communication with the memory controller via an input/output bus (Fig. 1 Ref. 16).

As to claim 44, Dinwiddie and Gibson disclose the invention as claimed above.

Dinwiddie further discloses information with an information type equal to control information, the system is configured to determine the memory destination to be the

multi-ported memory and not the main memory (separate address and control registers Refs. 25 and 30 and data memory Ref. 22 reads on this limitation, since address and control are directed to registers Refs. 25 and 30 while corresponding data is directed to memory 22).

As to claims 46 and 49, Dinwiddie and Gibson disclose the invention as claimed above. Dinwiddie further discloses writing the information to the memory destination based on the determining the memory destination (separate address and control registers Refs. 25 and 30 and data memory Ref. 22 reads on this limitation, since address and control are directed to registers Refs. 25 and 30 while corresponding data is directed to memory 22).

As to claims 47 and 50, Dinwiddie and Gibson disclose the invention as claimed above. Dinwiddie further discloses determining the memory destination between the main memory and the multi-ported memory based on the information type comprises determining the memory destination to be the multi-ported memory for the information type equal to control information (separate address and control registers Refs. 25 and 30 and data memory Ref. 22 reads on this limitation, since address and control are directed to registers Refs. 25 and 30 while corresponding data is directed to memory 22).

Page -7-Art Unit: 2186 Paper No.19

4. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dinwiddie, Jr. et al. (Dinwiddie) US Patent 4,371,932 in view of Gibson et al. (Gibson) US Patent 6,680,908 and further in view of McMahon et al (McMahon) US Patent <u>5,784,699</u>.

As to claim 41, Dinwiddie and Gibson disclose the invention as claimed above. However, neither Dinwiddie nor Gibson specifically discloses reservation bits mapped to block of general purpose memory in the multiported memory. McMahon discloses reservation bits mapped to block of general purpose memory in the multiported memory (Fig. 3A) for the purpose of providing fast search and allocation/dealloction of availability of a block (col. 3 lines 7-26).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate reservation bits mapped to block of general purpose memory in the multiported memory as shown in McMahon into the combined invention of Dinwiddie and Gibson because it would provide fast search and allocation/dealloction of availability of a block.

5. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Dinwiddie</u>, <u>Jr. et al.</u> (Dinwiddie) US Patent 4,371,932 in view of Gibson et al. (Gibson) US Patent 6,680,908 and further in view of Young et al (Young) US Patent 5,546,554.

As to claim 42, Dinwiddie and Gibson disclose the invention as claimed above. However, neither Dinwiddie nor Gibson specifically discloses virtual addresses within

multiported are mapped to physical address with smart addressing. Young discloses virtual addresses within multiported are mapped to physical address with smart addressing (Fig. 5a) for the purpose of memory that appears to an application to be larger and more uniform than it is.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate virtual addresses within multiported are mapped to physical address with smart addressing as shown in Young into the combined invention of Dinwiddie and Gibson because it would provide capability of memory that appears to an application to be larger and more uniform than it is.

Response to Amendment

6. Applicant's arguments filed on 12/29/03 have been fully considered but they are not persuasive.

Applicant's argument that the reference does not disclose a storage size is not considered persuasive.

Gibson discloses a storage capacity of about 4 kilobytes or greater (col. 6 lines 12-15) for the purpose of providing adequate storage space for the system thereby preventing system slow down or crash.

Applicant's argument that the reference does not disclose determining a memory destination is not considered persuasive.

Art Unit: 2186

Page -9-Paper No.19

<u>Dinwiddie</u> discloses determining a memory destination (separate address and control registers Refs. 25 and 30 and data memory Ref. 22 reads on this limitation, since address and control are directed to registers Refs. 25 and 30 while corresponding data is directed to memory 22). In other words, status and control signals are routed to command reg file, Ref. 25 and Handshake, Interrupt, and Misc Controls, Ref. 30 while corresponding data is routed to Storage, Ref. 22.

Also the main memory normally contains all kind of data for storage purposes, however during a program execution corresponding control/status signals are routed to registers for execution of the program. Therefore broadly written claims are disclosed by the references cited.

Conclusion

- 7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached PTO-892
- 8. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) days from the mail date of this letter. Failure to respond within the period for response will result in **ABANDONMENT** of the application (see 35 USC 133, MPEP 710.02, 710.02(b)).

Art Unit: 2186

Page -10-Paper No.19

- 9. Applicants are requested to number each line of each <u>claim</u> starting with line number one to provide easier communication in the future.
- 10. When responding to the office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections. See 37 C.F.R. '1.111(c).
- 11. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist examiner to locate the appropriate paragraphs.
- 12. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Hong Kim whose telephone number is (703) 305-3835. The Examiner can normally be reached on the weekdays from 8:30 AM to 5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Matt Kim, can be reached on (703) 305-3821.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

13. Any response to this action should be mailed to:

Art Unit: 2186

Page -11-Paper No.19

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to TC-2100:

703-872-9306

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

HK

Primary Patent Examiner

February 12, 2004